

IN THE CLAIMS

Please cancel Claim 11 without prejudice and amend Claims 1, 2, 3, and 5, and add Claims 12 and 13 as follows:

1. (Currently Amended) A complex switched-current bilinear integrator comprising, first and second inputs for a differential pair of in-phase input signals, third and fourth inputs for a differential pair of quadrature-phase input signals, first and second outputs for a differential pair of in-phase output signals, third and fourth outputs for a differential pair of quadrature-phase output signals, coupling the first, second, third, and fourth inputs and first, second, third, and fourth outputs by an arrangement of sample-and-hold circuits and coupled scaling circuits, and means for dynamic element matching whereby at least some of the scaling circuits are ~~interchanged~~ matched according to a predetermined switching sequence and whereby a coupling change of at least one coupled scaling circuit coupled to any of the sample-and-hold circuits occurs ~~a the~~ a beginning of a sampling operation by that sample-and-hold circuit.

2. (Currently Amended) A complex switched-current bilinear integrator as claimed in claim 1, wherein the arrangement of sample-and-hold circuits and coupled scaling circuits provides means for integrating signals present at each of the first second third and fourth inputs, means for scaling each of the integrated signals by a first scale factor, means for scaling the integrated signals by a second scale factor, and means for coupling the integrated signals scaled by the second scale factor to the inputs whereby ~~the said~~ in-phase and quadrature-phase signals are cross-coupled.

3. (Currently Amended) A complex switched-current bilinear integrator as claimed in claim 2, wherein at least some of the scaling circuits applying the first scale factor are interchanged ~~or at least some of the scaling circuits applying the second scale factor are interchanged.~~

4. (Original) A complex switched-current bilinear integrator as claimed in claim 2, wherein at least some of the scaling circuits applying the first scale factor are interchanged and at least some of the scaling circuits applying the second scale factor are interchanged.

5. (Currently Amended) A complex switched-current bilinear integrator as claimed in claim 4, wherein the interchanging effects averaging of four first scale factors ~~and/or effects averaging of four second scale factors.~~

6. (Original) A complex switched-current bilinear integrator as claimed in claim 5, wherein the predetermined switching sequence has a repetition period of four of the sampling operations.

7. (Original) A complex switched-current bilinear integrator as claimed in any one of claims 2 to 6, wherein the means for integrating comprises a pair of the sample-and-hold circuits alternately performing a sampling operation and alternately performing a holding operation, and wherein the sampling operation comprises sampling simultaneously a signal present at one of the inputs and a signal held concurrently by the other sample-and-hold circuit of the pair.

8. (Currently Amended) A complex switched-current bilinear integrator as claimed in claim 7, comprising a switching means for swapping said signals at the first and second inputs and for

swapping signals at the third and fourth input, the swapping being synchronous with the alternating sampling operation and holding operation of the sample-and-hold circuits coupled to the respective inputs.

9. (Original) A filter comprising a complex switched-current bilinear integrator as claimed in any one of claims 1 to 8.

10. (Original) A radio receiver comprising the filter as claimed in claim 9.

11. (Cancelled)

12. (Original) Apparatus comprising a complex switched-current bilinear integrator as claimed in any one of claims 1 to 8.

13. (New) A complex switched-current bilinear integrator as claimed in claim 2, wherein at least some of the scaling circuits applying the second scale factor are interchanged.

14. (New) A complex switched-current bilinear integrator as claimed in claim 4, wherein the interchanging effects averaging of four second scale factors